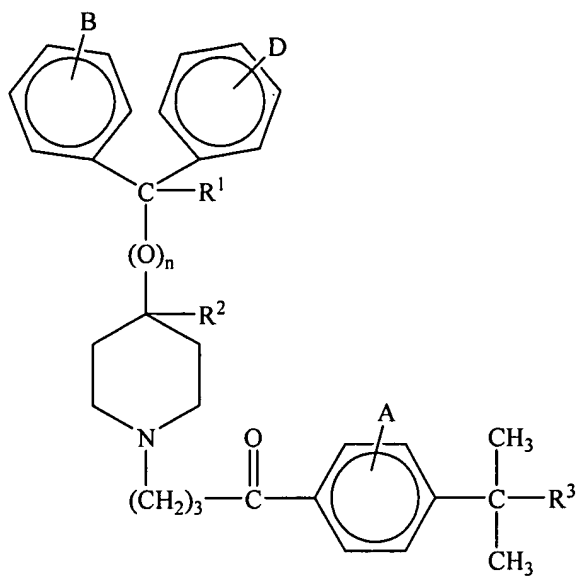
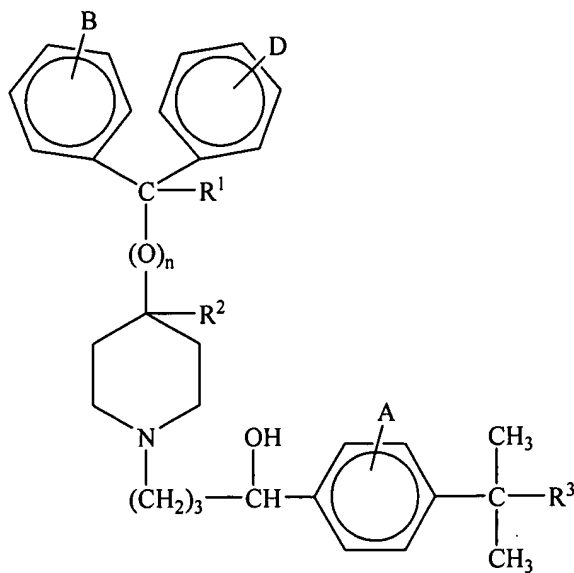


## CLAIM AMENDMENTS

1. (currently amended) A process for production of a product compound having a structure according to Formulae IA and/or IB:



(IA)



(IB)

wherein

$n$  is 0 or 1;

$R^1$  is hydrogen or hydroxy;

$R^2$  is hydrogen;

or, when  $n$  is 0,  $R^1$  and  $R^2$  taken together form a second bond between the carbon atoms bearing  $R^1$  and  $R^2$ , provided that when  $n$  is 1,  $R^1$  and  $R^2$  are each hydrogen;

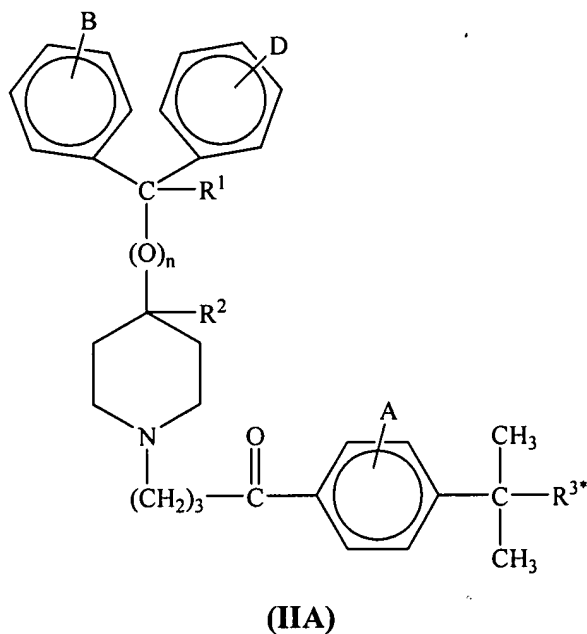
$R^3$  is  $-\text{COOH}$  or  $-\text{COOR}^4$ ;

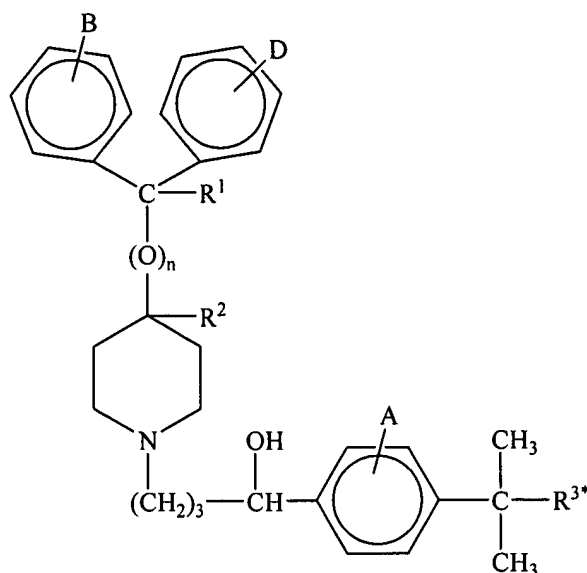
$R^4$  is an alkyl or aryl moiety;

A, B, and D are the substituents of their rings, each of which may be different or the same, and are selected from the group consisting of hydrogen, halogens, alkyl, hydroxy, and alkoxy,

said process comprising:

incubating a starting compound having a structure according to Formulae IIA and/or IIB:





(IIB)

wherein R<sup>3\*</sup> is -CH<sub>3</sub> and R<sup>1</sup>, R<sup>2</sup>, A, B, and D are defined above, in the presence of a microorganism under conditions effective to produce the product compound, wherein the microorganism is from a genus selected from the group consisting of ~~Stemphylium~~, ~~Gliocladium~~, ~~Bacillus~~, ~~Botrytis~~, ~~Cyathus~~, ~~Rhizopus~~, ~~Pycnidosphora~~, ~~Pseudomonas~~, ~~Helicostylum~~, ~~Mucor~~, ~~Gelasinospora~~, ~~Rhodotorula~~, ~~Candida~~, ~~Mycobacterium~~, and ~~Penicillium~~ Stemphylium consortiale, Gliocladium deliquescens, Bacillus cereus, Bacillus subtilis, Bacillus fusiformis, Botrytis allii, Cyathus striatus, Rhizopus oryzae, Pycnidosphora dispersa, Pseudomonas putida, Helicostylum piriforme, Mucor circinelloides f. griseo-cyanus, Mucor recurvatus, Mucor mucedo, Gelasinospora autosteria, Rhodotorula rubra, Mycobacterium bisrymcum, Candida guilliermondii, Candida lipolytica, Candida parasitosis var. quercus, Penicillium notatum, and Penicillium chrysogenum.

2. (currently amended) The process according to claim 1, wherein the microorganism is from the ~~Stemphylium~~ genus Stemphylium consortiale.

3. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Gliocladium* genus~~ *Gliocladium deliquescens*.

4. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Bacillus* genus~~ selected from the group consisting of *Bacillus cereus*, *Bacillus subtilis*, and *Bacillus fusiformis*.

5. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Botrytis* genus~~ *Botrytis allii*.

6. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Cyathus* genus~~ *Cyathus striatus*.

7. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Rhizopus* genus~~ *Rhizopus oryzae*.

8. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Pycniodosphora* genus~~ *Pycniodosphora dispersa*.

9. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Pseudomonas* genus~~ *Pseudomonas putida*.

10. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the genus *Helicostylum*~~ *Helicostylum piriforme*.

11. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Mucor* genus~~ selected from the group consisting of *Mucor circinelloides f. griseo-cyanus*, *Mucor recurvatus*, and *Mucor mucedo*.

12. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Gelasinospora* genus~~ *Gelasionospora autosteria*.

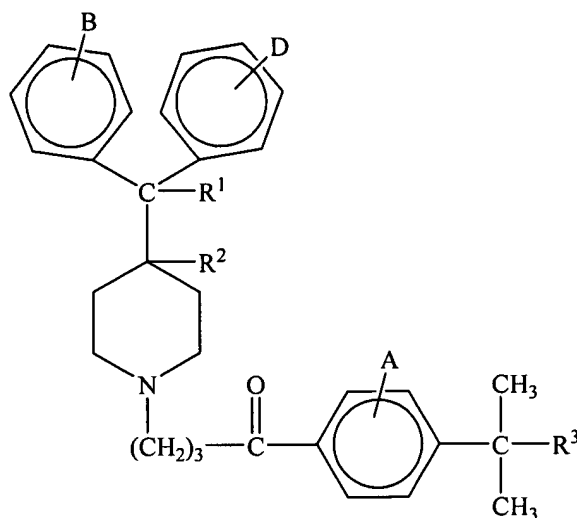
13. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Rhodotorula* genus~~ *Rhodotorula rubra*.

14. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Candida* genus~~ selected from the group consisting of *Candida guilliermondii*, *Candida lipolytica*, and *Candida parasilosis* var. *quercus*.

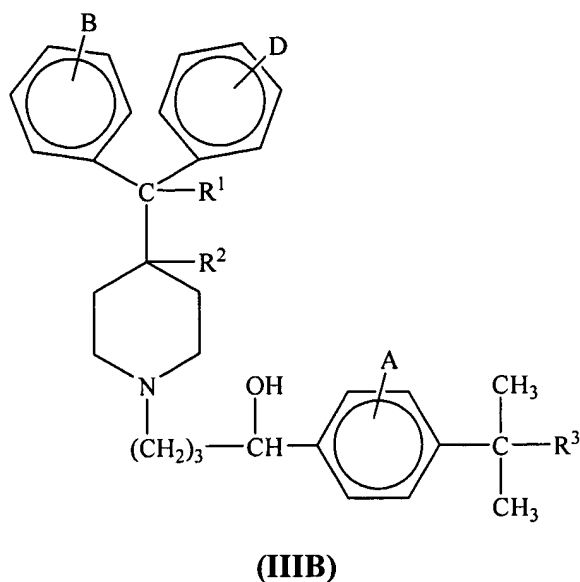
15. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Mycobacterium* genus~~ *Mycobacterium bisrymcum*.

16. (currently amended) The process according to claim 1, wherein the microorganism is ~~from the *Penicillium* genus~~ selected from the group consisting of *Penicillium notatum* and *Penicillium chrysogenum*.

17. (original) The process according to claim 1, wherein the product compound has a structure according to Formula IIIA and/or IIIB:



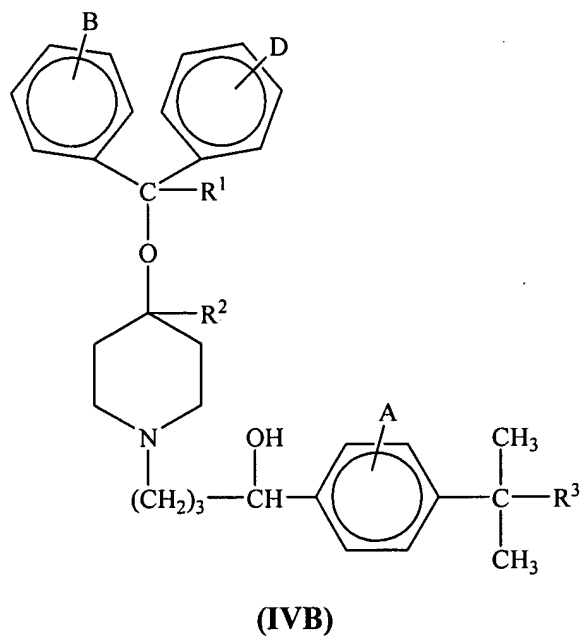
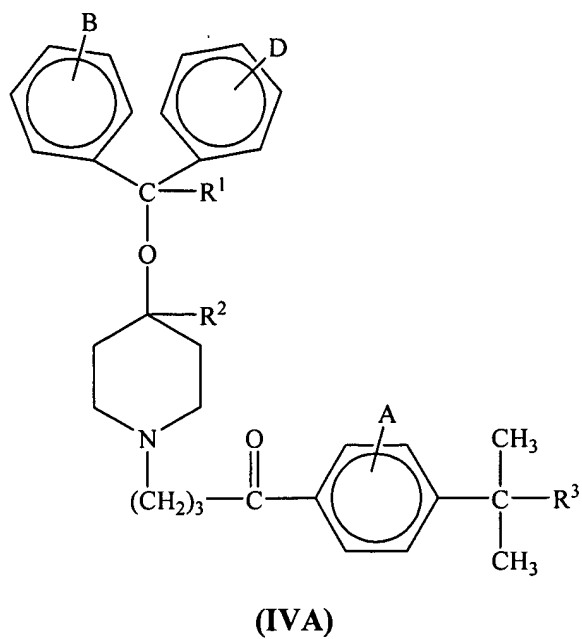
(IIIA)



wherein  $R^1$ ,  $R^2$ ,  $R^3$ , A, B, and D are defined above.

18. (currently amended) The process according to claim 17, wherein the product compound is ~~4-(4-(4-hydroxydiphenyl)-1-piperidiny-1-yl)-1-hydroxybutyl)- $\alpha,\alpha$ -dimethylphenylacetic acid~~ 4-(4-(4-hydroxydiphenyl)-1-piperidiny-1-yl)-1-hydroxybutyl)- $\alpha,\alpha$ -dimethylphenylacetic acid.

19. (original) The process according to claim 1, wherein the product compound has a structure according to Formula IVA and/or IVB:



wherein  $R^1$ ,  $R^2$ ,  $R^3$ , A, B, and D are defined above.

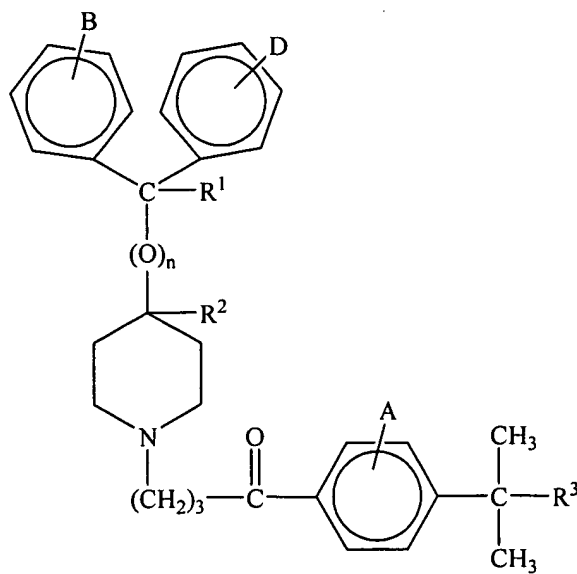
20. (original) The process according to claim 19, wherein the product compound is 4-[4-[4-diphenylmethoxy)-1-piperidiny]-oxobutyl]- $\alpha,\alpha$ -dimethylphenylacetic acid.

21. (original) The process according to claim 1, wherein said incubating is carried out at a temperature of 20° C. to 80° C.

22. (original) The process according to claim 1, wherein said incubating is carried out at a pH of 4 to 9.

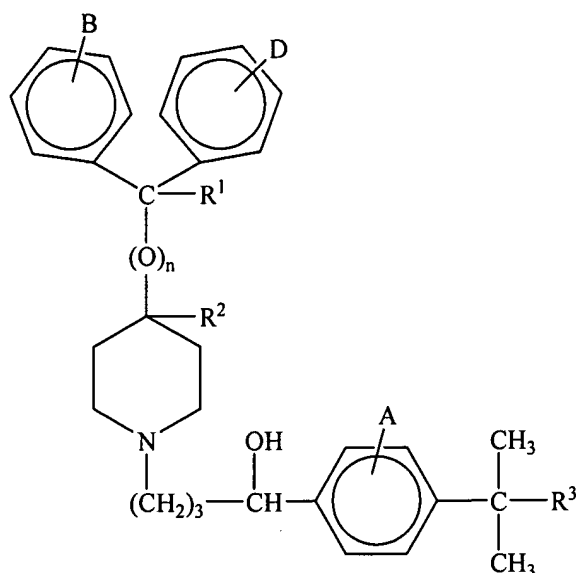
23. (original) The process according to claim 1, wherein said incubating is carried out for a period of 2 to 240 hours.

24. (original) A process for production of a product compound having a structure according to Formulae IA and/or IB:



(IA)





(IB)

wherein

n is 0 or 1;

R<sup>1</sup> is hydrogen or hydroxy;

R<sup>2</sup> is hydrogen;

or, when n is 0, R<sup>1</sup> and R<sup>2</sup> taken together form a second bond between the carbon atoms bearing R<sup>1</sup> and R<sup>2</sup>, provided that when n is 1, R<sup>1</sup> and R<sup>2</sup> are each hydrogen;

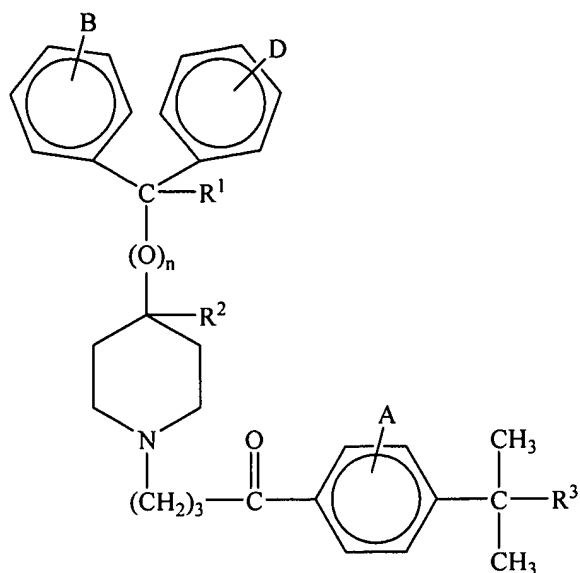
R<sup>3</sup> is -COOH or -COOR<sup>4</sup>;

R<sup>4</sup> is an alkyl or aryl moiety;

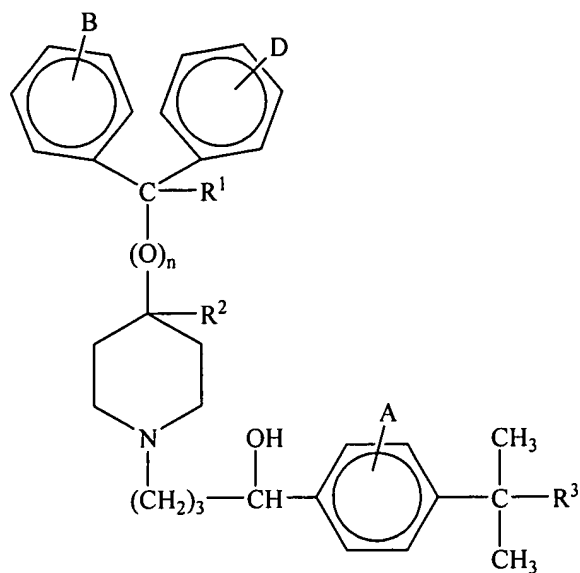
A, B, and D are the substituents of their rings, each of which may be different or the same, and are selected from the group consisting of hydrogen, halogens, alkyl, hydroxy, and alkoxy,

said process comprising:

incubating a starting compound having a structure according to Formulae IIA and/or IIB:



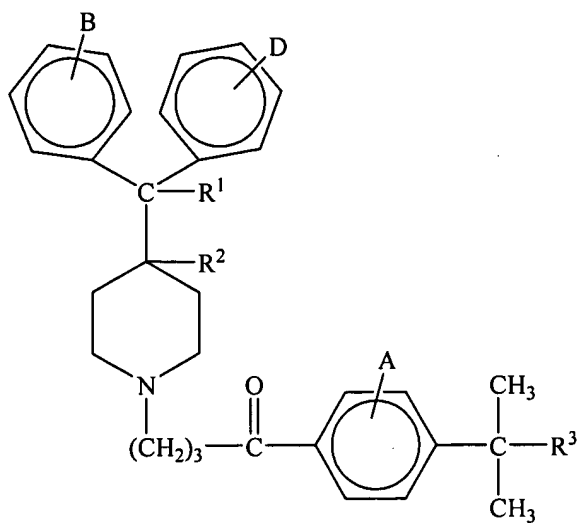
(IIA)



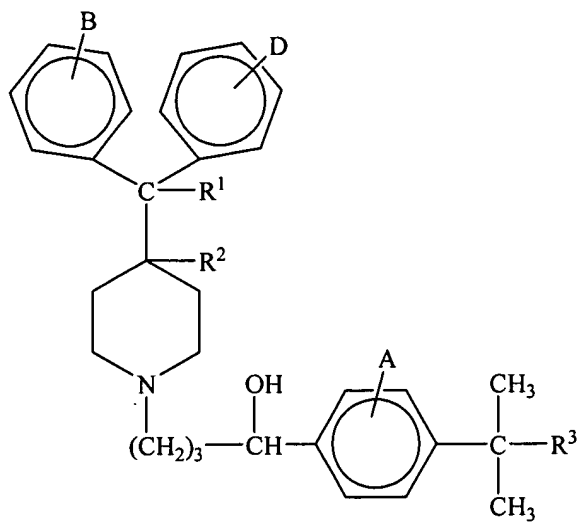
(IIB)

wherein R<sup>3</sup> is -CH<sub>3</sub> and R<sup>1</sup>, R<sup>2</sup>, A, B, and D are defined above, in the presence of *Cunninghamella bainieria* under conditions effective to produce the product compound.

25. (original) The process according to claim 24, wherein the product compound has a structure according to Formulae IIIA and/or IIIB:



(IIIA)

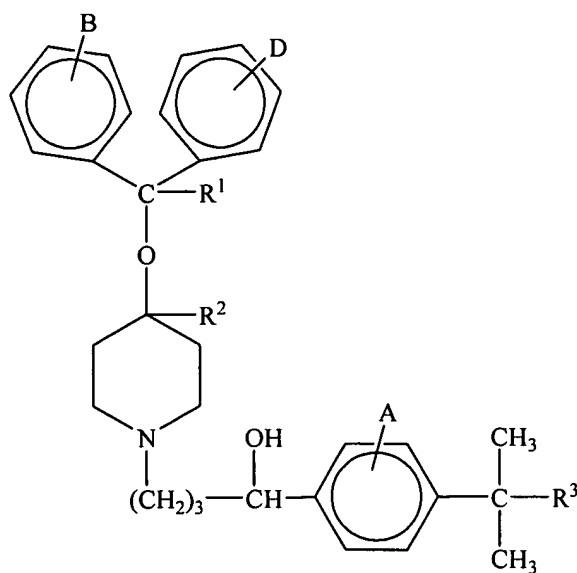
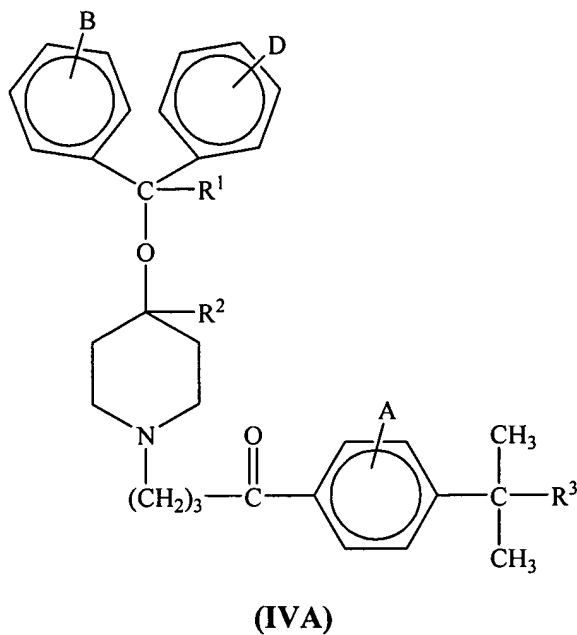


(IIIB)

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, A, B, and D are defined above.

26. (original) The process according to claim 25, wherein the starting compound is 4-(4-(4-hydroxydiphenyl)-1-piperidinyl)-1-hydroxybutyl)- $\alpha,\alpha$ -dimethylpenylacetic acid.

27. (original) The process according to claim 24, wherein the product compound has a structure according to Formulae IVA and/or IVB:



**(IVB)**

wherein  $R^1$ ,  $R^2$ ,  $R^3$ , A, B, and D are defined above.

28. (original) The process according to claim 27, wherein the product compound is 4-[4-[4-diphenylmethoxy)-1-piperidinyl]-oxobutyl]- $\alpha,\alpha$ -dimethylphenylacetic acid.

29. (original) The process according to claim 24, wherein said incubating is carried out at a temperature of 20° C to 80° C.

30. (original) The process according to claim 24, wherein said incubating is carried out at a pH of 4 to 9.

31. (original) The process according to claim 24, wherein said incubating is carried out for a period of 2 to 240 hours.

32. (original) The process according to claim 1, wherein prior to said incubating, the microorganism is subjected to cryopreservation or multi-stage liquid culture induction.